

05-GF-113 (6220)

1940,

11-8 A 10:39

January 7, 2003

Mr. Scot Cullen, Chief Electric Engineer Public Service Commission 610 N. Whitney Way P.O. Box 7854 Madison, WI 53707-7854 RECEIVED

Electric Division

RE:

In the Matter of Filing Reporting Requirements for Appropriate Inspection and

Maintenance, PSC Rule 113.0607(6)

Dear Mr. Cullen:

Enclosed for filing are 3 copies of Waterloo Water & Light's report to the commission, submitted every two years, showing compliance with its Preventative Maintenance Plan.

Sincerely,

Eugene D. Weihert

Cagene L. Weshert

Superintendent

TWO YEAR REPORT DOCUMENTING COMPLIANCE WITH THE PREVENTATIVE MAINTENANCE PLAN

WATERLOO WATER & LIGHT

FILING DEADLINE FEBRUARY 1, 2003

RECEIVED

. 57 - 2 260

Electric Division

January 7, 2003

Eugene D. Weihert

575 Commercial Ave.

Waterloo WI 53594

920-478-2260

eweihert@wppisys.org

This report format was prepared by the MEUW work group for PSC Rule 113.0607 for use by the 82 municipal electric utilities in Wisconsin and endorsed by PSC staff as meeting the requirements of Rule PSC 113.0607.

I Reporting Requirements: PSC 113.0607(6) states;

Each utility shall provide a periodic report to the commission showing compliance with its Preventative Maintenance Plan. The report shall include a list of inspected circuits and facilities, the condition of facilities according to established rating criteria, schedules established and success at meeting the established schedules.

II Inspection Schedule and Methods:

II IIISpecion Sensor		ANINITIAI	EVERY
SCHEDULE:	MONTHLY	ANNUAL	5 YEARS
Transmission (□69Kv)		X	X
Substations	X	X	
Distribution (OH & UG)			X

METHODS: Five criteria groups will be used to complete the inspection of all facilities.

- 1. <u>IR</u> infrared thermography used to find poor electrical connections and/or oil flow problems in equipment.
- 2. <u>RFI</u> Radio Frequency Interference, a byproduct of loose hardware and connections, is checked using an AM radio receiver.
- 3. <u>SI</u> structural integrity of all supporting hardware including poles, crossarms, insulators, structures, bases, foundations, buildings, etc.
- 4. <u>Clearance</u> refers to proper spacing of conductors from other objects, trees and conductors.
- 5. <u>EC</u> equipment condition on non-structural components such as circuit breakers, transformers, regulators, reclosers, relays, batteries, capacitors, etc.

Distribution facilities will be inspected by substation circuits on a 5 year cycle such that the entire system will be inspected every 5 years. Inspector instructions for inspecting all facilities and forms are included in the plan.

III Condition Rating Criteria

This criterion, as listed below, establishes the condition of a facility and also determines the repair schedule to correct deficiencies.

- 0) Good condition
- 1) Good condition but aging
- 2) Non-critical maintenance required normally repair within 12 months
- 3) Priority maintenance required normally repair within 90 days
- 4) Urgent maintenance required report immediately to the utility and repair normally within 1 week

IV Corrective Action Schedule

The rating criteria as listed above determine the corrective action schedule.

V Record Keeping

Circuit # and description

All inspection forms and records will be retained for a minimum of 10 years. The inspection form contains all of the required critical information i.e. inspection dates, condition rating, schedule for repair and date of repair completion.

VI Reporting Requirements

A report and summary of this plan's progress will be submitted every two years with the first report due to the Commission by February 1, 2003. The report will consist of a cover letter documenting the percent of inspections achieved compared to the schedule and the percent of maintenance achieved within the scheduled time allowance.

VII Inspected Circuits and Facilities

Circuit " und description	
East / overhead line	Eastside
West / overhead line	Eastside
North / overhead line	Main

Substation

The utility doesn't have any transmission lines or generation.

VIII Scheduling Goals Established and Success of Meeting the Criteria:

"It was this utility's goal to complete all monthly substation inspections and to inspect 50% of the distribution system on 1 sub-station. In addition, we expected to complete all scheduled maintenance resulting from the inspections within the prescribed time periods specified in the rating criteria.

All of the inspection goals were met or exceeded. 90% of the distribution system on the Eastside sub was inspected rather than 50% and 25% of the Main sub was done. No urgent maintenance or non-critical items were found. We also installed new poles and lines coming out of another sub to get rid of the copperweld wires.

IX Facility condition – rating criteria:

"During the past two years, 90% of the distribution system out of the Eastside sub was inspected and all substation inspections were completed on time. Of all the circuits the overall rating was in good condition but aging. Storm related outages have been minimal and equipment failure only accounted for 2 outages affecting 10 residential, 4 commercial and 1 industrial customer. The utility takes a section of line each year and does a rehab to prevent future customer outages.